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OIPE

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/932,172A

DATE: 05/29/2002  
TIME: 16:24:14

Input Set : A:\STEM1110-3.ST25.txt  
Output Set: N:\CRF3\05292002\I932172A.raw

2 <110> APPLICANT: STEM CELL PHARMACEUTICALS, INC.  
3 TWARDZIK, Daniel R.  
4 PERNET, Andre  
5 FELKER, Thomas S.  
6 PASKELL, Stefan

ENTERED

8 <120> TITLE OF INVENTION: TGF-alpha POLYPEPTIDES, FUNCTIONAL FRAGMENTS AND METHODS OF  
USE THEREFOR

10 <130> FILE REFERENCE: STEM1110-3  
12 <140> CURRENT APPLICATION NUMBER: US 09/932,172A  
13 <141> CURRENT FILING DATE: 2001-08-17  
15 <150> PRIOR APPLICATION NUMBER: US 09/641,587  
16 <151> PRIOR FILING DATE: 2000-08-17  
18 <150> PRIOR APPLICATION NUMBER: US 09/492,935  
19 <151> PRIOR FILING DATE: 2000-01-27  
21 <150> PRIOR APPLICATION NUMBER: US 09/378,567  
22 <151> PRIOR FILING DATE: 1999-08-19  
24 <160> NUMBER OF SEQ ID NOS: 7  
26 <170> SOFTWARE: PatentIn version 3.0  
28 <210> SEQ ID NO: 1  
29 <211> LENGTH: 50  
30 <212> TYPE: PRT  
31 <213> ORGANISM: Homo sapiens  
33 <400> SEQUENCE: 1  
35 Val Val Ser His Phe Asn Asp Cys Pro Asp Ser His Thr Gln Phe Cys  
36 1 5 10 15  
38 Phe His Gly Thr Cys Arg Phe Leu Val Gln Glu Asp Lys Pro Ala Cys  
39 20 25 30  
41 Val Cys His Ser Gly Tyr Val Gly Ala Arg Cys Glu His Ala Asp Leu  
42 35 40 45  
44 Leu Ala  
45 50  
47 <210> SEQ ID NO: 2  
48 <211> LENGTH: 50  
49 <212> TYPE: PRT  
50 <213> ORGANISM: Rattus norvegicus  
52 <400> SEQUENCE: 2  
54 Val Val Ser His Phe Asn Lys Cys Pro Asp Ser His Thr Gln Tyr Cys  
55 1 5 10 15  
57 Phe His Gly Thr Cys Arg Phe Leu Val Gln Glu Glu Lys Pro Ala Cys  
58 20 25 30  
60 Val Cys His Ser Gly Tyr Val Gly Val Arg Cys Glu His Ala Asp Leu  
61 35 40 45  
63 Asp Ala  
64 50

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66 <210> SEQ ID NO: 3  
 67 <211> LENGTH: 57  
 68 <212> TYPE: PRT  
 69 <213> ORGANISM: Artificial sequence  
 71 <220> FEATURE:  
 72 <223> OTHER INFORMATION: Modified human TGF-alpha sequence  
 74 <400> SEQUENCE: 3  
 76 Ser Leu Ser Leu Pro Ala Met Val Val Ser His Phe Asn Asp Cys Pro  
 77 1 5 10 15  
 79 Asp Ser His Thr Gln Phe Cys Phe His Gly Thr Cys Arg Phe Leu Val  
 80 20 25 30  
 82 Gln Glu Asp Lys Pro Ala Cys Val Cys His Ser Gly Tyr Val Gly Ala  
 83 35 40 45  
 85 Arg Cys Glu His Ala Asp Leu Leu Ala  
 86 50 55  
 88 <210> SEQ ID NO: 4  
 89 <211> LENGTH: 11  
 90 <212> TYPE: PRT  
 91 <213> ORGANISM: Artificial sequence  
 93 <220> FEATURE:  
 94 <223> OTHER INFORMATION: Modified human TGF-alpha sequence fragment  
 96 <220> FEATURE:  
 97 <221> NAME/KEY: VARIANT  
 98 <222> LOCATION: (1)..(10)  
 99 <223> OTHER INFORMATION: Xaa at residue 1, 5, 7 to 9 is independently V, G or A; Xaa  
 at residue 6 is Y or F; and Xaa at residue 10 is R or K  
 100 <400> SEQUENCE: 4  
 104 Xaa Cys His Ser Xaa Xaa Xaa Xaa Xaa Cys  
 105 1 5 10  
 107 <210> SEQ ID NO: 5  
 108 <211> LENGTH: 7  
 109 <212> TYPE: PRT  
 110 <213> ORGANISM: Artificial sequence  
 112 <220> FEATURE:  
 113 <223> OTHER INFORMATION: Modified human TGF-alpha sequence fragment  
 115 <220> FEATURE:  
 116 <221> NAME/KEY: VARIANT  
 117 <222> LOCATION: (1)..(7)  
 118 <223> OTHER INFORMATION: Xaa at residue 1 and 4 is E or D; Xaa at residue 3 and 7 is  
 V, G, or A; Xaa at residue 5 is L or I; and Xaa at residue 6 is D or E  
 124 Xaa His Xaa Xaa Xaa Xaa Xaa  
 125 1 5  
 127 <210> SEQ ID NO: 6  
 128 <211> LENGTH: 18  
 129 <212> TYPE: PRT  
 130 <213> ORGANISM: Artificial sequence  
 132 <220> FEATURE:  
 133 <223> OTHER INFORMATION: Modified human TGF-alpha sequence fragment

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135 <220> FEATURE:  
136 <221> NAME/KEY: VARIANT  
137 <222> LOCATION: (1)..(18)  
138 <223> OTHER INFORMATION: Xaa at residue 1, 5, 7-9, 14, 18 is indep. V, G, or A; Xaa

at

139 residue 6 is Y or F; Xaa at residue 10 is R or K; Xaa at residue 12,  
140 15 is indep. E or D; Xaa at residue 16 is L or I; Xaa at residue  
141 17 is D or E

143 &lt;400&gt; SEQUENCE: 6

W-→ 145 Xaa Cys His Ser Xaa Xaa Xaa Xaa Xaa Cys Xaa His Xaa Xaa Xaa

W-→ 146 1 5 10 15

W-→ 148 Xaa Xaa

151 &lt;210&gt; SEQ ID NO: 7

152 &lt;211&gt; LENGTH: 7

153 &lt;212&gt; TYPE: PRT

154 &lt;213&gt; ORGANISM: Artificial sequence

156 &lt;220&gt; FEATURE:

157 &lt;223&gt; OTHER INFORMATION: Modified human TGF-alpha sequence fragment

159 &lt;220&gt; FEATURE:

160 &lt;221&gt; NAME/KEY: VARIANT

161 &lt;222&gt; LOCATION: (1)..(7)

162 &lt;223&gt; OTHER INFORMATION: Xaa at residue 1 and 2 is indep. V, G, and A; Xaa at residue

7 is

163 K or D

W-→ 165 &lt;400&gt; SEQUENCE: 7

W-→ 167 Xaa Xaa Ser His Phe Asn Xaa

168 1 5

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/29/2002  
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Input Set : A:\STEM1110-3.ST25.txt  
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**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; Xaa Pos. 1, 5, 6, 7, 8, 9, 10  
Seq#:5; Xaa Pos. 1, 3, 4, 5, 6, 7  
Seq#:6; Xaa Pos. 1, 5, 6, 7, 8, 9, 10, 12, 14, 15, 16, 17, 18  
Seq#:7; Xaa Pos. 1, 2, 7

### Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 8